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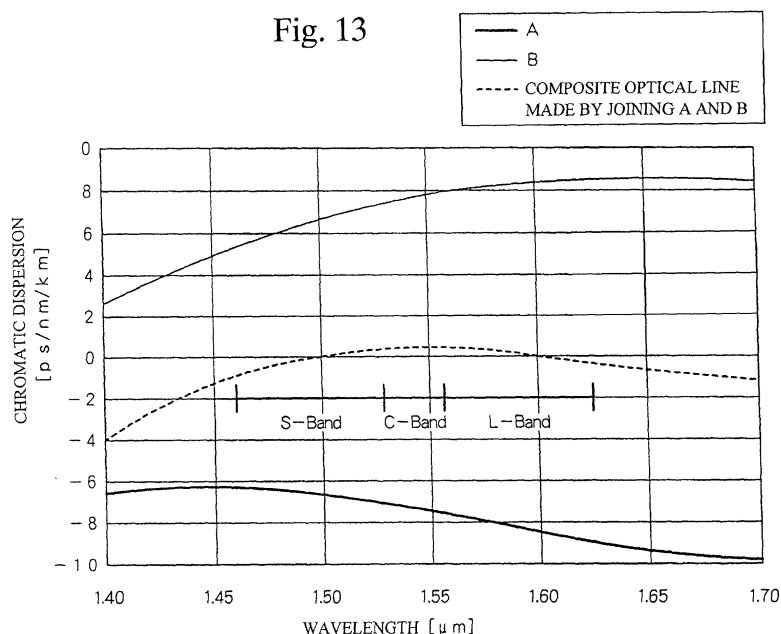
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(54) **Single-mode optical fiber and composite optical line**

(57) A single-mode optical fiber has core layers and cladding layers, and is produced in such a way that, when the radii of the layers are varied, more than one optical property of the core, for example, the effective core area A_{eff} and the dispersion slope, exhibit limiting values within a specific range of a reference radius.

Such optical fibers provide basically the same optical properties but allow the tailoring of chromatic dispersion and bending loss over a specific range without substantially affecting the A_{eff} or the dispersion slope of the fiber, so that the single-mode optical fiber is ideally suited for use in high-speed and large capacity communication systems.

Fig. 13





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Place of search MUNICH		Date of completion of the search 24 May 2004	Examiner Anderson, C
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